

108. (amended) A method of modifying or detecting a polynucleotide, said method comprising:

(a) providing in combination:

i) a medium suspected of containing said polynucleotide,
ii) a first oligonucleotide or a molar excess of said first oligonucleotide relative to the concentration of said polynucleotide, with said first oligonucleotide having a 3' portion capable of reversibly hybridizing to said polynucleotide and a 5' portion which does not hybridize to said polynucleotide,

iii) a 5'-nuclease, and optionally

iv) a second oligonucleotide that hybridizes to a site on said polynucleotide that is 3' of the site at which said first oligonucleotide hybridizes,

(b) reversibly hybridizing under isothermal conditions said polynucleotide and said first oligonucleotide, wherein said first oligonucleotide, when hybridized to said polynucleotide, is cleaved by said 5'-nuclease as a result of the presence of said polynucleotide to provide: (i) a first fragment that is substantially non-hybridizable to said polynucleotide, or a first fragment including said 5' portion and no more than one nucleotide from the 5' end of said 3' portion, and (ii) a second fragment that is 3' of said first fragment with reference to said first oligonucleotide and is substantially hybridizable to said polynucleotide, and optionally

(c) detecting the presence of said first fragment, said second fragment, or said first and second fragments, the presence thereof indicating the presence of said polynucleotide.

REMARKS

Claims 108-111 are at issue in the present Application and have been rejected by the Examiner. The Examiner has made a number of objections and rejections that are addressed below. Applicants submit that the present Application is in condition for allowance.